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THE WEEKLY BEE JOURNAL

DEVOTED TO THE INTERESTS OF HONEY PRODUCERS.

ESTABLISHED IN
1861.

Chicago, Ill., May 28, 1884.

VOL. XX.—No. 22.

THE WEEKLY EDITION

OF
THE AMERICAN BEE JOURNAL

PUBLISHED BY
THOMAS G. NEWMAN,
EDITOR AND PROPRIETOR.
925 WEST MADISON ST., CHICAGO, ILL.
Weekly, \$2 a year; Monthly, \$1.

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THOMAS G. NEWMAN,
925 West Madison Street., Chicago, Ill.

Topics Presented in this Number.

Are Bees Taxable in Illinois	347
Bees along the Pacific Coast.....	347
Bees in Eastern Ohio	347
Bees Storing Honey Rapidly.....	347
Botanical.....	347
Clipping the Queens' Wing	344
Concerning Thermometers	346
Convention Hand-Book.....	350
Correspondence	340
Dandelions and White Clover	347
Diarrhoea alias Dysentery	341
Disabled Queen	348
Editorial Items.....	339
Facts regarding Sweet Clover....	345
Good Results.....	347
Honey and Beeswax Market.....	348
How my Bees Wintered.....	347
Introducing Fertilized Queens....	348
Keystone Convention	343
Local Convention Directory.....	347
Northern Georgia	343
Northern Ohio Convention.....	342
Northwestern Ohio Convention ..	345
Not one Colony lost	348
Packing, Feeding, Wintering, etc.	346
Priority of Location.....	340
Questions about Queens.....	348
Reversible Frames.....	345
Seasonable Hints.....	339
Selections from our Letter Box...	347
Special Notices.....	349
Spurious California Honey.....	339
Still Room for more	348
Weather Unfavorable for Bees ...	347
What and How.....	348
What the Bees think of it	343
Women as Apiarists	347

Preparation of Honey for the Market, including the production and care of both comb and extracted honey, instructions on the exhibition of bees and honey at Fairs, etc. This is a new 10 cent pamphlet, of 32 pages.

☞ Letters for publication must be written on a separate piece of paper from items of business.

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☞ The ninth annual session of the American Association of nursery men, florists, seedsmen, and kindred interests, will be held at the Sherman House, Chicago, Ill., commencing on Wednesday, June 18, 1884, at 10 o'clock a. m., and continuing three days.

☞ A Canadian wishes us to state in the BEE JOURNAL, whether we take Canadian money for subscription or books. We do; and for fractions of a dollar, Canadian postage stamps may be sent.

☞ Cook's Manual in cloth and the Weekly BEE JOURNAL for one year will be sent for \$3. Manual and Monthly, \$2.00. We have no more of the old edition left, and, therefore, the club price of that edition at \$2.75 and \$1.75 is withdrawn.

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Dzierzon's Rational Bee-Keeping.—A Translation of the Masterpiece of that most celebrated German authority, by H. Dieck and S. Stutterd, and edited, with notes, by Charles N. Abbott, Ex-editor of the "British Bee Journal." Dr. Dzierzon is one of the greatest living authorities on Bee Culture. To him and the Baron von Berlepsch we are indebted for much that is known of scientific bee culture. Concerning this book, Prof. Cook says: "As the work of one of the great masters, the Langstroth of Germany, it can but find a warm welcome on this side of the Atlantic." Mr. A. I. Root says of it: "Old father Dzierzon, having fully mastered the intricacies of scientific apiculture than any one man... For real scientific value, it would well repay any bee-keeper whose attention is at all inclined to scientific research, to purchase a copy. Cloth, \$2.

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Preparation of Honey for the Market, including the production and care of both comb and extracted honey, and instructions on the exhibition of bees and honey at Fairs, etc., by T. G. Newman. This is a chapter from "Bees and Honey." Price 10c.

Swarming, Dividing and Feeding Bees.—Hints to Beginners, by Thomas G. Newman. This is a chapter from "Bees and Honey." Price, 5c.

Bee Pasturage a Necessity, by Thomas G. Newman.—Giving advanced views on this important subject, with suggestions what to plant, and when and how: 26 engravings. This is a chapter from "Bees and Honey." Price, 10c.

Bees in Winter, with instructions about Chaff-Packing, Cellars and Bee Houses, by Thomas G. Newman. This is a chapter from "Bees and Honey." Price, 5c.

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Quinby's New Bee-Keeping, by L. C. Root.—The author treats the subject of bee-keeping so that it cannot fail to interest all. Its style is plain and forcible, making all its readers realize that the author is master of the subject.—\$1.50.

The Hive I Use.—Being a description of the hive used by G. M. Doolittle. Price, 5c.

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Honig als Nahrung und Medizin—von Thomas G. Newman. Dieses enthält eine klare Darstellung über Bienen und Honig des Alterthums; die Beschaffenheit, Qualität, Quellen und Zubereitung des Honigs für den Handel; Honig als Nahrungsmittel, angebend wie man Honigtuchen, Formkucheln, Biddings, Schaumkonfekt, Weine, u. s. w. zubereiten kann; ferner Honig als Medizin mit vielen Rezepten. Es ist für den Conumenten bestimmt, und sollte vieltausendfältig über das ganze Land verbreitet werden. Preis 6 Cents.

Das Pferd und seine Krankheiten—Von B. J. Kenball, M. D., enthaltend ein alphabetisch geordnetes Verzeichniß der verschiedenen Pferdekrankheiten, sammt den Ursachen, Symptomen und der richtigen Behandlung derselben; ferner, eine Sammlung werthvoller Rezepte. Preis 25 Cents.

THOMAS G. NEWMAN.

925 West Madison St. CHICAGO, ILL.

Weekly Bee Journal,

DEVOTED TO THE INTERESTS OF THE PRODUCERS OF HONEY.

VOL. XX.

CHICAGO, ILL., MAY 28, 1884.

No. 22.

THE AMERICAN
BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,
EDITOR AND PROPRIETOR.

Seasonable Hints.

The busy season in the apiary has now arrived, and we hope all are prepared for it. Very frequently the delay of a few days in getting hives, sections, comb foundation, etc., results in a partial failure of the honey harvest, or the loss of many swarms of bees. Therefore every one should endeavor to get such supplies before they are needed, and thus save annoyance and loss. We hope all our readers now have such things on hand. If not, no time should be lost in getting them. To buy the lower-priced articles simply because they are cheap, frequently is extravagant economy. Those that are sold for the lowest price, are often the most expensive when put to the test.

Another point is to provide pasturage for the bees, so that when the usual honey dearth comes, the bees may revel in nectar provided by the timely planting of good honey-producing plants.

Judicious forethought, displayed by liberally scattering good seed for honey plants, will be supplemented by Nature in the future, by extending that pasturage when most needed by the bees, and will also furnish the seed free of charge for doing so.

To those who expect to solicit public patronage of any kind, there is no economy in practicing a "masterly inactivity" by waiting for the public to discover unadvertised merits. If they have more bees than they wish to keep—or any meritorious supplies to sell to bee-keepers, let those papers that are devoted to that specialty announce it. All such should provide themselves with good stock or articles

to sell, and then place themselves prominently before the bee-keeping public as ready to receive its favors, and return an *honest equivalent* for orders lodged with them.

A word of caution is necessary here. We have received complaints of some who sent orders last year to supply dealers that have not yet been filled. Purchasers should be cautious about sending money to those who have not established a reputation, or can point to a good record.

Spurious California Honey.

The course of adulteration has made itself known in California, and in the following letter, Messrs. Stearns & Smith, honey dealers in San Francisco, propose the following remedy:

"Through the widely circulated AMERICAN BEE JOURNAL, we desire to call the attention of our Pacific Coast honey producers, and especially those of California, to the urgent and immediate necessity of a law or laws against the adulteration of honey, and the sale of the same. Our dairymen have met and discussed the matter of adulteration, and our State Legislature has enacted a law protecting them against the sale of "bull butter," or oleomargarine, and we hope our different Bee-Associations will take this matter up. California honey has a world-wide reputation for purity and excellence. There is for sale on the market a vile compound, under fancy labels named "honey," composed of about 40 per cent. of honey, 50 per cent. of glucose and 10 of water; it is a libel on our industrious bees; it works a great hardship to their owners; and, where it is shipped to other places, it gives our fine honey a bad name, and there lies the great damage to our honey producers. We hope they will talk this matter up and send men to the next State Legislature that will look to their interest and protect by law this great industry of California.

Mr. Orange Judd, who has for nearly a quarter of a Century edited the *American Agriculturist* in New York, has now moved to Chicago and become editor of the *Prairie Farmer*, and we hope he will make it a success. We welcome him to the West.

Some of the results of carelessness may be seen from the following, which occurred this week. We had a letter from a subscriber who complained of not getting any of his BEE JOURNALS for over a month; and then adds, send my paper to—post office. After spending much time to look the matter up, we found that he had moved from the former address, but did not notify us, expecting perhaps, that we "knew all about it," and would change the address. After several weeks the P. M. notified us to stop sending the BEE JOURNAL; that the person addressed had moved away. Then the name was taken from the "type-mail-list." Now we have to get it "set up" again, and inserted, send the numbers over again, and all the trouble and annoyance, on account of pure carelessness. This is only one of the many results of such heedlessness occurring all the while. We do wish all would do business in a common-sense way.

The *Indiana Farmer* has this to say about the use of bee-veils: "Many decry the use of veils in the bee-yard, but we believe that all beginners should use them until they acquire confidence in themselves. After one becomes conceited enough to think bees will never sting him, then let him throw aside the veils—at least for a time." There are times, during a good honey flow, that any one may do without any protection, but it is always best to have a smoker near by, ready for use; for when needed at all, it is very necessary.

We have received Prof. John Phin's book, entitled "A Dictionary of Practical Apiculture." It contains 80 illustrated pages, and is bound in cloth. Price 50 cents. This has long been a necessity, and will be found to be a very valuable assistant to writers on apiculture. We hope it will lead to the more correct use of apicultural words. For sale at this office.

CORRESPONDENCE

For the American Bee Journal.

Priority of Location.

JAMES HEDDON.

I am glad that I started the investigation of this subject. The more glad am I, because that it is one of great interest to the honey-producers of the near future. All that the earnest and honest are seeking in this discussion, is to get a clear, general understanding of justice in the matter.

On page 311, Mr. Pond says, that in my reply to his article upon this subject, I "nowhere touch his position." Has he changed his position, since seeing that the practical honey-producers of the country have grown wise faster than he has, or he supposed they had? In order to discover that his "position" was to tear down my first claims upon this subject, read both articles. He set up a position, not of claims of priority, but actual ownership of nectar; that a poor man was "selfish," if he did not wish to have a rich one divide the honey-field with him; that professional amateurs had discovered most of the needs of the practical honey-producers, etc.

I thought I understood these positions; that they were weak, and I answered them. I think Mr. Pond has misunderstood me in referring to his being a lawyer. I had not the least idea of throwing a crumb at Mr. P.'s intellectual qualifications by mentioning his law-practice. The brightest ones, like the brightest apiarists, as a rule, make their business a specialty. What I meant was, that he who devoted all his mental or physical energies to the theory and practice of apiculture, and who must support himself and family from the profits of that business, would be most apt to have correct ideas upon the subject.

Mr. Pond, in using the term "right," forgets to prefix it with the word "moral," or "intellectual." We well know that all have and should have a legal "right" to locate where they please; hence the greater necessity for knowledge regarding this question, which is the very purpose of the present agitation.

It seems to me that the rest of Mr. Pond's arguments are like this last one, regarding "the butcher, the baker, and the candlestick maker." The fewer butchers and bakers we have in a town (below a certain number), the less the competition, and the worse for the buyers; because butchers and bakers (unlike honey-producers) are selfish, and want all they can get for bread and meat. They have no amateurs to tell them how wrong this selfishness is, in this communistic world where hardly any one looks much to his individual interest.

But in the light of our jealously watching the best interests of the consumer, it is, with us, very different from the "butcher and baker;" for

any invention, or ought else; take the honey extractor for instance, which enables us to produce honey more cheaply—gives it to the consumer correspondingly cheaper.

As we increase the number of well-gathered honey-fields, we lower the price of honey, redounding to the interest of the consumer. And in proportion, as we increase the number of apiarists in any given area or field, making the product cost each beekeeper more than it would did he enjoy the entire field alone, we are working against the interest of honey consumers, as well as the producers, in this divided field.

Mr. Doolittle does not mention the basic principle of my former article; let me repeat it: We believe from our experience, observation, and reading, that some number of colonies will overstock a field; i. e., that there is a limit to the number placed in that field for profit. These can be owned and managed much more cheaply by one apiarist than by two; and one apiarist can manage them more profitably in one field than in two, provided that one is not overstocked.

I believe that the future price of honey will be regulated by the average cost of production; that he who produces at maximum cost, will fail; and he who produces at minimum cost, will succeed.

If we leave all legal "rights" to the field out of the question, then, for argument, throw out moral "rights." Can you not see that if all coming apiarists were properly educated upon this subject, there would be no division of fields, or need for this discussion?

Regarding personal experience, Mr. D. must take into consideration several facts which are not applicable to the future: 1. Bee-keeping is well-nigh a specialty with him; he has it "on the brain;" his neighboring farmers did not. About the time he had run in, they had run out. Bee-culture was changing from the old to the new system. He changed with it—they did not. In times and under conditions like that, he certainly had a right to go to keeping bees in that field; and his experience is only another evidence of the "survival of the fittest."

In regard to his chapter No. 2, where he has helped neighbors into business, he did just what I have done several times. His neighbor succeeded probably because he kept a comparatively small number of colonies in a field which was, no doubt, much more difficult to overstock than mine or the most of other fields. His honey-flow coming less continuously and more bountifully, makes it difficult to overstock.

I am beginning, this spring, with something over 200 colonies in each of two apiaries, and I do not believe that any second party can make apiculture profitable in either of these fields. If I am mistaken, I heartily wish I could be convinced of it; for then I would not sell a colony until I could start in each field with 400 colonies, spring count. Every additional colony that I keep, I can manage some cheaper than any one of the preceding number.

One would imply, by one of Mr. D.'s sentences, that if one did start in my field, I would be his enemy. By no means. Three or four have tried this, during the past 15 years. Because I had opposition, which might poison some minds, I took special pains to be courteous and friendly, and did all I could to assist them. Each made an ignominious failure, never producing one pound of honey that did not cost more than twice as much as it would bring.

Among intelligent and energetic apiarists, some are more successful than others, and perhaps would be so even in the same field; but there is not enough difference for any man to run out another of this class, who already has a good start in the business. There is no man whose energy and intelligence we need fear, who will be so weak as to attempt to do such an absurd thing. Capital has too much judgment and acquisitiveness behind it, to take so rash a step.

Messrs. Doolittle and Clarke concede that my ideas on this subject, with certain modifications, are correct. I have little faith in any pretention, in the line of apicultural missionary work. Bee-keepers like others should do business upon business principles. The intelligent apiarist does not expect, and will not accept of something for nothing. We do not want charity; we want honesty and justice. Give us the latter and we will never need the former.

Mr. Doolittle and myself seem to be "odd sheep" in the apicultural field. He is the only apiarist who depends upon honey alone for his support, who has a passion for "gushing." The latter, however, seems to be dying out in him. I am not sure but that I am almost, or quite, the only one whose financial interests are as great in supplies, as in the production of honey, and who is trying to brake the wheel of overdone apiculture. This may, perhaps, be accounted for upon the grounds that each thinks he is following truth, and enjoys her sweet fragrance more than dollars. Let us trust that this is so.

My friend and antagonist, W. F. Clarke, is a hard man to handle, even though he is wrong. His experience in discussion, literature and the world; his terse expression and vigorous, pointed thought, together with little experience as a modern apiarist, and never having a necessary concern in the interests of honey-producers, makes it very difficult to set him aright. Mr. Clarke should not claim better judgment in regard to the honey-yielding capacity of my own locality, than I have, after watching the results in it for 15 years. I ought not to be "oversensitive" in regard to matters in which my bread-and-butter interests are so evenly divided. I feel that I am not. I detest "monopoly," and I see no monopolizing spirit in trying to arrange matters so that honey-producers can sell their honey cheap (for they will have to), and yet be able to decently provide for their families.

Mr. Clarke, having such great faith in my field, congratulates me on the comforting fact that, when I find so

many bee-keepers in it, that none can succeed, we can "plant." Will it not be ample time to agitate the "planting" question, when at least one-half of the nectar now going to waste, in unoccupied fields, is gathered?

Have we not had evidence enough, that farming and apiculture are naturally opposed to each other's success? I can show ample evidence in this County.

I have already tried to show that comparison between selling goods and securing honey are great misfits; also between honey-producing and gardening. Increase gardens all you please, and the operations of one on the next acre, in no way makes the productions of the next one more expensive, as is the case with honey-production.

Mr. Clarke says, "it would be a long time before a village would have a second store, if the prior consent of merchant No. 1, must be had before starting it."

In this, Mr. Clarke has had a good chance to judge, and is, no doubt, correct. We also know that the propensity of benevolence is equally distributed throughout all the different legitimate callings of life. Are bee-keepers more interested in humanity? Or is it only the few who have some "ax to grind" (and expect that the dupes to these broad, philanthropic views, will turn the grind-stone), who advise us to abandon self-interest, for the interest of an outside class, who are assiduously working for their own individual interests.

Mr. Clarke wonders what I will think of him after reading his article. Well, I think he is among the "mistaken," and always will be, I presume, until he lays aside all other sources of income, except apiculture, and then in a few years will get at the facts. The inexperienced are on the one side, and the experienced on the other.

Dowagiac, Mich., May 15, 1884.

For the American Bee Journal.

Diarrhœa alias Dysentery.

J. F. LATHAM.

The editor of the BEE JOURNAL defines the malady "Bee-Diarrhœa." Perhaps his definition is as correct as any, when an allusion to the disease is made in a general sense; but, as the symptoms accompanying diarrhœa, and those accompanying dysentery, are developed by phases not strictly allied, characteristically, we will term the kind we wish to talk about dysentery or abnormal secretion; and assume a position that will admit of an analogical construction.

Any cause which produces an excessive stimulation of the animal functions, has a tendency to produce a deranged secretion of the fluids which are demanded by the animal economy to replace, by assimilation, the waste of organic tissue. In normal conditions the animal functions have a particular work, and each organ, by performing its allotted duties, is not overtasked by being compelled to aid a defective co-worker; no excessive heat

is generated in the removal and production of animal tissue.

Nature receives her revenues, and disburses them as her requirements demand, and the whole organic mechanism moves harmoniously. Introduce agents in any form, or of any character, that will cause disturbance in this harmonious process, and disorganized action will be the result. It matters not from what source the irritating elements are derived, the consequence of their working possesses a similarity, although they may not at all times effect the same results, being modified in a greater or less degree by the influence of surroundings or conditions in which their subjects are placed.

If this functional derangement continues for a certain time, it will terminate in general debility, weakness, defective action, etc. Digestion and assimilation are impaired and the chyle that should aid in renewing the wastes of the body, remains in the intestinal receptacles, and becomes virulent.

As bees in our Northern climate are compelled to remain in confinement a long time in winter, a portion of this effete matter is drawn into the circulation; and, as they will not void their feces in the hive, except from dire compulsion, it may be very correctly imagined what the consequence will be, when a colony is forced to combat such baneful conditions, without an opportunity to relieve its distended organs when necessity demands.

The causes tending to a development of the deranged condition alluded to in the foregoing, are so numerous and variable, and so connected in their relations, that the effect of their workings cannot be attributed to any one cause alone; but as the food eaten, the air breathed, and the means used for protection from cold, comprise the main requirements for the support of animal life, so do they contain elements which will tend to its destruction when improperly constituted, or defectively applied.

Nature has constituted the honey-bee to maintain life, and perform its allotted duties from the nectar and farina of the flowers; and, in the season of bloom, when she can sip the exuding sweets, and gather the chaste pollen in their pristine purity, and rear her young on their health-producing elements, her workings display vigor and activity. Then nature—instinct,—the indices of attributes omnipotent, require no manipulation.

But, as the devices of man have made the bee a domestic contributor to his desires, when the frosts of autumn forbid her aerial wanderings, and the rigors of winter confine her to the hive, his intelligent care is demanded for her protection and support. To fulfil the requirements of nature, honey in its original purity, or its substitute, is the only aliment needed by a colony of bees in winter; in fact, it is the only food they will partake of when inactive. As children of nature they live by her monitions, and in their acts comply with her promptings.

During their winter's sleep their physical requirements demand but little nitrogenous food. Comb-building is dispensed with, and no brood is reared, unless conditions prompt the renewal of a too rapid loss of numbers; then activity requires a nitrogenous diet, and pollen, an indispensable auxiliary in brood-rearing, is needed, and will be consumed by the old bees while nursing their young. The young bees reared under such conditions, and those reared late in the fall and do not leave their cells until winter has set in, must retain their feces until an opportunity for a "fly" is given them. If the weather is not favorable for such an opportunity, at a proper time, they must invariably succumb to the effects of virulent fecal accumulations.

This condition is prominently indicated by the bees crawling from their hives late in the fall, or in their flying out and perishing on the snow in early winter. This condition of brood-rearing after cold weather has set in, and its harmful effects on pollen-eating bees, seems to be one that will bear investigation by those who so very strenuously advocate "late fall breeding."

That there are other conditions, is evident; but, as activity prompted the consumption of pollen in this instance, it seems that to activity, should be accredited the prime cause of the trouble. Another cause exists in sour honey—nectar not sufficiently ripened to prevent acetic fermentation, or, in the parasitic productions incident to such a stage of decomposition. This fermentation may take place before the honey is used as food, or it may occur in the debilitated stomach or intestinal canal of the consumer, when conditions will not permit sufficient capillary contraction to expel that proportion not needed in a healthy digestion or assimilation.

To unripened nectar, may be added other compounds accumulated as stores, which are too well known to the observing bee-keeper to need enumerating. All colonies of bees are not as neat in their house-keeping as health demands. The combs in some colonies are not kept as free from refuse matter as those in others; and, as the nectar when stored in foul combs must partake of their uncleanness, it cannot make such food as bees require in winter.

From these deductions, based on observation, and confirmed by the statements of others who have lost their bees under conditions attributable to the causes named, I have no hesitancy in stating that acetic fermentation is the first great cause of diarrhœa among bees during confinement in winter.

As a test, let any bee-keeper take a colony of bees that he wishes to kill, and feed them to distention on diluted honey in its first stages of fermentation, with or without pollen, keeping them the while in a cold atmosphere without "flying" at proper intervals; and if the process does not produce diarrhœa, let us know through the BEE JOURNAL.

Good air and protection from cold, are requirements that should receive a rigid attention from the bee-keeper, if located in our Northern climate; especially in the New England States, where one hour does not indicate what the next may bring forth.

Approximate localities differ. One apiarist may suffer loss of bees, and another a few miles distant may survive the winter in good condition; the colonies in both instances having received the same care, or as nearly so as is possible to give.

A warm, damp atmosphere will not kill a colony of bees in winter. It may stimulate activity, and induce brood-rearing; but if brood-rearing is not induced, the warmth generated by the cluster cannot be harmful where means are provided for a proper circulation of fresh air inside of the hive.

When in a semi-dormant state, the denizens of the hive require but little oxygen to support life, or to neutralize any harmful effects resulting from the accumulation of carbonic-acid gas in their surroundings. As this gas, when occupying space in quantities detrimental to animal life, moves earthward, it is easy to comprehend how readily the inside of a bee-hive may be freed from its effects, by proper downward ventilation, accompanied by an imperceptible "upward ventilation;" i. e., an "upward ventilation" not strong enough to produce a rapid current of air through or around the cluster.

Again, where the life-supporting elements: oxygen, hydrogen, and carbon, are needed to maintain animal heat, dampness in some form is an actual necessity; for without these elements, the combustion required for the propulsion of the animal mechanism, will not be produced.

Cumberland, Me.

For the American Bee Journal.

Northern Ohio Convention.

The Northern Ohio Bee-Keepers' Association met in the City Council Chamber at Norwalk, O., April 24, at 10:30 a. m., with President Samuel Fish, of Milan, O., in the chair. The Secretary's report of the last meeting was read and approved. Seven new members were enrolled.

The election of officers was postponed until the afternoon, and the forenoon was spent in receiving reports from the members on "Wintering."

Pres. Fish: My Bees wintered successfully in a bee-house; set them out on April 14, after a confinement of about five months; they might have been profitably left in ten days longer. They came out strong in bees, but with very little brood; early brood rearing having nearly ceased, but was rapidly resumed on being set out. Wintered 6 colonies on the summer stands, in chaff hives; lost one; I prefer indoor wintering.

H. R. Boardman winters bees successfully in a bee-house, essentially the same as Mr. Fish's, and in about the same manner, except setting them out nearly a month earlier. The old

bees having died the colonies are light but have an abundance of mature brood.

These two reports, so different in result, called forth a spirited discussion upon the policy of setting out bees early. The prevailing sentiment was not favorable to setting out early, unless set back again until the cold winds of March were over.

S. F. Newman winters bees in the cellar and on the summer-stands, in chaff hives. He prefers chaff hives and out-door wintering.

E. R. Gibbs wintered them successfully in chaff hives out-doors.

Mr. Darling: My wintering was not successful; they wintered out doors on summer-stands; I attribute my loss to lack of ventilation, from defect in the hive.

Mr. Bartow wintered them on summer-stands, with very poor results.

Dan White wintered them successfully on the summer-stands, in chaff hives, without loss.

Many other reports were received, all showing that bees wintered moderately well, but were much enfeebled by the cold and unfavorable spring.

Adjourned till 1:15 p. m.

The afternoon meeting was called to order at 1:30, by the President. The following officers were elected for the ensuing year:

President, S. F. Newman, Norwalk.
Vice President, Mrs. A. Bartow, N. Milan.

Secretaries, H. R. Boardman and E. Townsend.

Treasurer, E. R. Gibbs, Norwalk.

Treas. Gibbs reports a balance in the treasury of \$6.20.

Question—"Spring Management." Dan White described, with much enthusiasm, how he builds up in the spring even very light colonies, so that they will be strong enough to swarm in the swarming season, by using a division board in the hive to crowd the bees on as few combs as possible, and feeds, back of the division-board, either reserved stores or granulated sugar syrup.

Pres. S. F. Newman adopts about the same course as that practiced by Mr. White, except that he would not stimulate the lightest colonies by feed; but build them up from the stronger ones later in the season, by giving cards of brood.

Samuel Fish keeps his bees in late in the spring; discourages early brood-rearing, gives plenty of stores, uses the division-board sometimes, but does not attach as much importance to its use as many bee-keepers do.

Mr. Albright builds up light colonies in the spring by feeding sugar-syrup, which he pours into combs, and sets in the hive next to the bees; succeeds well in this way.

A warm discussion then arose upon the use of the division-board for building up colonies in the spring. Some advocated its use, and others would dispense with it as useless and unnecessary.

Mr. H. R. Boardman read a very interesting essay on Feeding Bees in the Spring, which will appear in the BEE JOURNAL soon. [Ed.]

Question—"Swarming, and the Production of Comb Honey"—which was very thoroughly discussed.

Mr. Fish adopts the plan practiced by James Heddon, of Michigan. Mr. White thinks shade plays an important part in preventing bees' swarming.

Pres. Newman gives the swarm some of the combs and brood from the colony from which it issued, and also the unfinished surplus of the colony is given to the swarm to finish.

Mr. Boardman has long ago given up trying to prevent swarming while producing comb honey.

Mrs. Allen Bartow made a few very sensible remarks on "Planting for Bee Forage." She also read the following report by her husband, Mr. Allen Bartow, of his observations in Southern Texas, during the last winter:

Bee-keeping in Texas is more profitable, as a whole, than it is in the North. Wintering is not a problem, as they do not perish with cold as many have done in Ohio during the last and many preceding winters. The Texan bee-keeper winters his bees out-of-doors without any protection other than their summer hives, thus saving the cost of building expensive bee-houses. 1. They have short winters and consequently the bees do not consume so much of their stores as ours do. 3. The long summers afford more time for gathering honey, and the great variety and abundance of flowers furnish an almost inexhaustible supply.

Besides the small flowers which clothe all the plains and valleys with beauty, there is a great variety of trees whose blossoms afford honey; a few are: Linden, live-oak, black-jack, box-elder, sumac and agaretta.

They do not have the advantage of fruit blossoms, except the wild fruits, as there are but few orchards. Apples do not do well in that climate, and probably never will, and the same may be said of cherries. Peaches do better but they do not afford much honey. The cotton plant, however, affords considerable honey and of good quality. Buckwheat is raised with tolerable success and is another resource; but last though not least, is the "honey-dew," which I was told by Mr. Surber and others, giving such large quantities when it occurs that the amount gathered is often surprising to the bee-keeper who is unprepared. The Texans use hives of various kinds, from the box to the latest improved frame-hive.

At Camp Verde I ate honey of good quality. The product per colony is 90 lbs. comb. and often it is 100 lbs. Last season was a poor one owing to the long drouth, and no doubt was an exception to the average season, as Mr. Surber told me his yield was about the same, and he is an intelligent man and a good apiarist.

In Texas the bee-keeper's enemies are the bee-martin and the moth. The careless lose largely by the latter. I visited one apiary, the owner of which had lost fully one-half of his bees by the moth. This was evidently the result of neglect, as he had too much

other business, being a druggist. His hives were hard to handle, although they had movable frames, and they were also too much shaded. Bees require some shade in this climate, in the middle of the day in summer; but he had overdone the shade business, and as a consequence lost.

I believe bees handled there as we do in the North, would pay well. The climate is healthy and pleasant in winter and not overly warm in summer. The people are intelligent and courteous.

An interesting letter was also read by Mrs. Bartow, from Mr. A. B. Surber, a bee-keeper of Southern Texas, in reply to several questions asked him in regard to bee-keeping in that State.

The following was passed: "Resolved, That the thanks of this Association are due, and are hereby tendered to Mr. Samuel Fish, for the able manner in which he has presided over this Association during the past two years, and for the uniform kindness which he has at all times exercised toward its members." Mr. Fish thanked the members for their courtesy.

A vote of thanks was given to the City Council for the use of their room. Also to S. F. Newman, for his past services as Secretary of the Association.

Adjourned to meet at the call of the Secretary.

H. R. BOARDMAN, Sec.
S. F. NEWMAN, Pres.

For the American Bee Journal.

The "Keystone" Convention.

The Keystone Bee-keepers' Association met lately at Scranton, Pa.

After reading the minutes of previous meeting, the election of officers was held and J. Vandervort, of Laceyville, was elected President, D. J. Peck, of Harford, Vice President, A. A. Davis, of Clark's Green, Secretary, and C. E. Miller, of Justice, Treasurer.

After the transaction of business the subject, "Do Bees Injure Fruit or Crops?" was discussed; in which the majority of the members participated. The opinion expressed seemed to indicate that instead of being injurious they were a benefit in many respects.

One gentleman said that he had noticed that buckwheat always yielded a better crop if frequented by large numbers of bees, and so of other crops. An idea existed that some farmers paris-green their buckwheat and other crops for the purpose of destroying the bees, and a remonstrance was expressed against such a deplorable measure. The President stated that the English government has gone to considerable expense to have the common bumble-bee introduced into Australia for the purpose of fertilizing red clover, and had met with but partial success. Others who had experimented in several ways claimed that bees, to all classes of fruit, were beneficial and should be encouraged. Adjourned. C. E. MILLER, Sec.

For the American Bee Journal.

Northern Georgia.

L. K. DICKEY.

On page 139, in calling the attention of Northern bee-keepers to this country, I asked this question: "Why do not enterprising bee-keepers in the North, who are seeking a better field for their business, come to Northwest Georgia and help us develop out honey resources?"

On page 201 Mr. Leonidas Carson says: "The answer is plain. Enterprising men of all occupations in the North are loth to settle in the Southern States so long as lawlessness is excused and goes unpunished;" and then says he has reference to the trouble at Danville, Miss. I do not know whether he alludes to the riot at Danville, Va., or to the outrages in Copiah County, Miss. I can not see why the trouble at either or both of these places 500 or 600 miles distant should deter enterprising men of any section from coming to Northwest Georgia, unless there is evidence that our people sympathize with such lawlessness.

In my opinion there is no such evidence to be found outside the fertile imagination of Mr. Carson. I am a native of this State and county and an ardent Republican in politics, and now hold an honorable position to which I was elected chiefly by Democratic votes. No one can feel more keenly than myself, the injustice and wrongs perpetrated in some of the Southern States for political purposes.

Now let me say to Mr. Carson and others in the North, whose "eyes are turned southward," to the land he so beautifully describes, that our people are, in the main, plain, clever people, and are as law-abiding as those of any section of the union; and before becoming prejudiced against this section on account of those troubles which occurred in other States, and at great distances from us, to come, see, and investigate for yourselves. These unfortunate occurrences should no more deter you from coming here than the recent riot in Cincinnati, or the recent outrage on Mr. McDewitt in Ohio, should deter me from going to Grundy County, Ia.

For further information concerning our people let me refer you to an article published on page 171, BEE JOURNAL for 1881, written by Mr. Moon of Rome, Ga., who, I believe, was a Northern man.

This is a broken, hilly, mountainous country, with fertile valleys intervening. These hills are generally poor, though sufficiently fertile to grow fruit and vegetables, and moderate crops of grain. In the valleys it is reasonably productive, growing corn, wheat, oats, clover, fruit and vegetables. There is generally an abundance of running water. As a bee-country it is good, though our honey flow is not so profuse as it is in some sections of the North.

As I said in my letter, our honey resources are not developed. The largest yield that I have heard of is 160 lbs. extracted honey, per colony.

I think Mr. Good's advice on page 217 is timely and wise; though I think he has been in quite a poor country. I would much prefer a location reasonably near to Chattanooga which is a fast-growing city of about 20,000 inhabitants, and is of much importance as a manufacturing and railroad center.

High Point, Ga.

For the American Bee Journal.

What the Bees Think of it.

MRS. DR. E. MASON.

"Why so much uncertainty about wintering, ventilation, and spring dwindling?" I am thinking these much abused bees must often say, "what fools these mortals be. One stows us in a dark, damp, moldy and foul-aired cellar; restrains us of liberty, fresh air, and the bright sunshine, which is so essential to life and health, even in the coldest weather; another stows us in a room or dry cellar, but robs us of our liberty, prevents our flight also, until we crawl about the floor and die; another hills us up like cabbage and turnips, and almost all, more or less, shake us up, haul us away from our summer stands, fret and scare us until we are half crazy, every spring and fall. Then they talk of 'safe wintering' and 'spring dwindling.' Is it any wonder that, in our fright and anger at such treatment, we die, or, that our honey tastes strong and gives the cramps, and injures the sale of it? Give us gentle, loving hands to attend us, and our honey is sweet and healthful at all times. Good mortals, please let us rest from that kind of treatment. It is labor, fatigue, and loss to you, and disease, craze, and death to us. Please let us have thick, double-walled, chaff-lined hives, well painted to preserve the hive and keep the dampness out. Lay 2 or 3 bars or sticks, one-half inch thick, across the top-bars, that we may pass freely over and cluster on the top-bars. Lay over us a new cotton or burlap honey-cloth, covering every crevice; for ventilation, in the shape of crevices, hardens the combs and honey, and is death to us. Then lay a pillow smoothly over the honey-cloth, and shut the box cover closely, leaving no part of the honey-cloth or cushions caught between the cover and the hive to absorb dampness."

There is no other cushion-material equal to feathers; for they retain the heat—are always dry and light, and the space between the cushion and the top of the box-cover, is a hot-air chamber. Cotton batting, covered with unbleached muslin, is the next best cushion as a substitute for feathers. Raise the back of the hive 2 or 3 inches higher than the entrance, so as to carry off all water, dead bees, etc.

I have kept from 50 to 100 colonies of Italian bees for 10 years, and I have never had any trouble in wintering them; nor had sickness of any kind among them; nor "spring dwindling," which can be prevented by commencing in January, to place rye flour in sunny places about the hives, and on

the ends of the alighting-boards; also shallow pans with combs filled with slightly-salted water. A little judicious feeding stimulates and encourages the bees, and prevents their flying so far from home in the cold, spring air, to flour and sawmills, where sometimes whole colonies are killed by the flour and sawdust. Good wintering and spring care will prevent "spring dwindling." Keep the bees always on the same stands in winter and summer; put up good water-proof sheds fronting to the South or East, tightly boarded up on the back, eave troughs to carry off the rain at the back, and a wide board nailed across the front, to prevent the rain and snow from blowing in on the hives; and see that the earth or flooring under the hives is perfectly dry.

The advantage in keeping bees in one place is, that they are more gentle, and in swarming they rarely fly but a few feet from the shed, and settle on the first shrub or plant, and often on the corner of the same hive. As soon as they are hived, I lift them up and set them by the side of the hive from which they issued. If in rows near together, they are more friendly, and are not given to robbing.

As to disease among bees: I have not a doubt but that it is bred from dampness, mold, bad air, cold, and want of sunlight. One diseased colony might contaminate a neighborhood. Shut one family of children in dark, damp, and moldy rooms or basements, deprived of fresh air, sunlight, and exercise, and they may generate scarlet fever so deadly, as to deprive a healthful city of its inmates.

You do not want your houses filled with crevices, broken windows, and holes in the ceilings, in order to have "ventilation;" neither do your bees. They can fan in and out, with their wings, all the fresh air they want. Always have a sort of entrance hall or close portico in front of the hives. It shields the bees from cold blasts and sudden changes.

If the sun shines too warm on the fronts of the hives, and there is snow on the ground, stand up a shingle or board to shade the entrance, thus preventing their flying into the snow. Try this method of management. It has been a perfect success with my bees.

Vincennes, Ind.

For the American Bee Journal.

Clipping the Queen's Wing.

W. H. STEWART.

On page 612 of the BEE JOURNAL for 1883, I read the following:

On page 576 of the BEE JOURNAL for 1883, I find an article by Mr. W. H. Stewart, entitled, "Shall we Clip our Queens' Wings?" at the close of which he says: "If I were offering queens for sale as superior stock, I would compel the brood mothers to fly often, even if I had to toss them up to give them a start." I wish to ask him a question to illustrate the matter in a different light. Suppose

that he had a brood mare from which he wished to rear colts noted for speed, would he consider it necessary or advisable, during foal, that she be driven at a high rate of speed, with a view of transmitting that quality to the offspring? W. N. HOWARD.

Derby, Vt.

I regret that he did not put the question differently. If by the word foal, he means the period during gestation, I would say that I think it would be very wrong to treat the mare as some bee-keepers are treating their queens, viz: placing them in a close, dark hive, and depriving them of their organs of locomotion. To treat the mare in like manner, would be to confine her in a close, dark stable, and cut her legs off.

I hold that it would be very necessary and advisable, to drive the brood mare every day at as high speed as sound judgment would dictate, with a view of keeping her organs of locomotion in a strong and healthy condition, for the purpose that she might be able to transmit that condition to her offspring.

I know not what Mr. Howard would have me understand by the term "a high rate of speed." Some horses are able to trot a mile in much less than 3 minutes, while it would overtax and injure others to travel half as fast.

In my article on, "Shall we Clip the Queens' Wings," I stated that "overwork or excessive strain, would injure any member of the bee or other animal." If any member of a horse or bee is overtaxed, then it becomes weak and diseased; and I stated that a "condition of weakness may be transmitted to the offspring."

I do not propose to write articles for the BEE JOURNAL on the subject of breeding fast horses; but I would like to have some fast bees. In one sense, the horse-question has nothing to do with modern bee-culture; but in the sense that I infer Mr. H. intended the question, it has very much to do with it.

In my article on page 54, I stated that "I hold that all animal life is governed by the same universal law, from which there is no divorce." When we have learned that temperate labor, in any class of animals, whether running, trotting, walking or flying, is healthful, and that its tendency is the development of vigor, then we have solved the question in regard to all other classes of animals.

We often hear of brood-mares working before the plow up to within 15 minutes of the birth of their colts, and yet both mares and colts remained in good health; yet if the mares had been worked or driven to excess, both would most likely have died.

I did not state that I would compel queens to fly until their strength was exhausted, or enough to do them a physical injury; but that "I would compel them to fly often."

We often see queens fly from the combs while being handled; they are gone for a short time, and then return to their hive all right, and appear as though they had enjoyed the fly first-rate; and, as work goes on in the brood department as regularly as before,

we conclude that the fly did them no injury. Birds seem to fly just as easily and safely, and seem to enjoy it just as well while they are producing eggs, as at other seasons of the year.

We have often opened the hive, after the queen and her young swarm had just left it, and we judged, from the abundance of fresh eggs found in the combs, that she has been busy depositing eggs up to the time when she started out with the swarm.

Again, when we have put the queen and the young swarm in a new hive on empty combs, the work of depositing eggs has been resumed in a few minutes, and, as the work goes briskly on, we know that the fly in swarming did her no harm. Some queens fly several times during the swarming season, and, when they leave for the woods, we find that they are able to fly long distances, and very swiftly, too.

None of us know how many times a queen with wing not clipped, leaves the hive during the warm season, for a healthful fly in the open sunshine; and we know not the pleasure and delight that they experience during those aerial excursions; nor yet do we know how important, and lasting impressions, both mental and physical, are being transmitted to the tiny egggerms during the happy flight, because of the mental ecstasy of the mother.

Who can depict the power of mind over matter? The mind of man drives the "iron monsters across oceans and continents, and along the many rivers that thread the bosom of mother earth, and takes control of the lower forms of the animal kingdom." Who can tell what the mind of man may yet do with and for the honey bee?

I would answer Mr. Howard's question, by asking a few more questions, for the purpose of reminding him of truths with which he must already be somewhat familiar. Is he not aware that a scare, or other mental excitement of a disagreeable nature, often makes strange and woeful impressions, both mental and physical, upon the embryo, even in the human race? That certain mental conditions often make sad inroads upon our health, and at other times restore health after it is once broken? That the most successful physician is the one that has the happy faculty of approaching a sick person with a pleasing smile that awakens hope and confidence in the weak and nervous sufferer? That these manifestations are the expressions of one of nature's laws that embraces all animal life?

In his question, he "supposes that I have a brood-mare from which I wish to rear colts noted for speed, etc." Here I will "suppose" that the mare is able to travel at a "high rate of speed," and that her members of locomotion are well developed and hardened by practice; that her mental faculties have been well schooled on the race-course; that she, like many other sporting horses, is quiet and easily handled until she is led up to the well-known race-track, and hitched before a sporting sulky; that she sees and understands at that moment what is at hand, and at once becomes so ex-

cited and frantic for the match, that it requires a good horseman to control her. Every muscle becomes rigid, her ears lie back on her neck—her foaming and parted lips give you a clear view of her ivory that is violently grinding at the curbing steel between it; both front feet high in the air, and her nostrils wide distended. I will suppose that she is pregnant, and I will allow her to enter the match for a short distance, and often repeat the operation during gestation, being careful not to allow her to overdo at any time. I hold that it is not the "high rate of speed" that would be likely to injure her, or the colt; but compelling her to continue that speed until her strength was exhausted, would be dangerous to both.

Do you ask why I would thus treat the brood-mare? I answer that "it is a well known fact, that when any faculty of an animal becomes excited, that excitement prompts an extra flow of the best blood to a corresponding member. That blood makes an extra deposit of building-material with which it is laden, and the result is an extra development of that member. In thus exciting the faculties, and developing the members of the mother, a corresponding work is at the same time going on in the embryo.

In the production of colts, bees, or anything else that has life, the parents reproduce themselves, and neither the mental or physical condition of the offspring, at birth, can in any way exceed the combined conditions of the parents. All further development must be made by a process of growth of the offspring after its birth. Imprisonment comes not of the race in common; it is confined to favored individuals. Those individuals may, under favorable circumstances, transmit that individual growth or improved condition.

I hold that it is "advisable and necessary," that we excite the desirable qualities or faculties of the brood-mother, for the reason that, by so doing, we are all the while building up, through the mother, the desired capabilities in the offspring; and I also hold that, under proper treatment, the possibilities of improvement of the animal kingdom, are unbounded.

Who can depict the coming speed,
Of coming bee, or coming steed?
With nerve to outstrip the iron horse,
And vie with the whirlwind round the course.

'Tis man that builds the iron steed,
His limited wisdom, means limited speed;
Infinite wisdom provides the nerves,
Adapted to the age it serves.

In balance nice, weigh nature's law,
Of growth and fitness 'gainst a straw;
Read on your standard when you're done,
What e're ends well, was well begun.

Orion, Wis.

Northwestern Ohio Convention.

The Northwestern Ohio Bee-Keepers' Association met at the residence of S. H. Bolton, in Hancock county, O., on May 9, 1884.

The meeting was called to order by the President, Jacob Ginsinger; and as the meeting was for the study of practical work in the apiary, the committee on programme announced the following as the order of business: 1.

Transferring bees. The first colony to be transferred by Mr. Frank Eaton, the second colony, by the President, and the third, by any one wishing to do it; 2. forming nuclei; 3. introducing queens.

All then adjourned to Mr. Bolton's apiary (containing 52 colonies) and, Mr. Eaton being absent, Mr. Ginsinger, with the necessary implements, transferred a colony from a box hive, in a short time. Mr. Eaton then came and did the same, making a neat job. Adjourned until afternoon.

After dinner all took a view of Mr. Ginsinger's apiary, which consists of some 30 or 40 colonies, and is in fine condition. All then returned to Mr. Bolton's and the third colony was transferred in about 15 minutes.

The remainder of the programme was completed after which the convention proceeded to fix the time and place for holding the next meeting, and on motion, the time was fixed for July 25, 1884, at Ottawa, O.

On motion S. P. Weaver, Jacob Ginsinger and F. M. Blakeman were appointed a committee to arrange a programme for next meeting.

On motion the following resolution was adopted: *Resolved*, That any lady or gentleman may become a member of this Association, by furnishing the Secretary with his or her post-office address, and paying such sum as may be fixed upon by the Association.

On motion the fee for admission and annual dues was fixed at 25 cents.

J. H. Smith was elected Treasurer.

A vote of thanks was tendered Messrs. Bolton and Ginsinger, and their wives, for their kindness and hospitality manifested during the day.

Adjourned to meet at Ottawa, O., July 25. F. M. BLAKEMAN, Sec.

For the American Bee Journal.

Reversible Frames.

OSCAR F. BLEDSOE.

All valuable improvements in every department of civilization have arisen from suggestions to the minds of men who work and think at the same time. To work without thought leads to no progress; to think without work leads to vague and valueless theories; but to think and work, leads to progress.

After various suggestions, I hit upon a device by which all wood frames can be reversed at pleasure without manipulating a fixture or attachment; and now I am making all my new hives with reversible frames. About April 1, I hived a first swarm on reversible frames, which now has the brood-nest full of nice all-worker combs, and one set of section-boxes about ready to take off.

For starters on my frames, I use strips of worker comb fastened on with equal parts of rosin and wax melted. If the rosin is not put in, a heavy colony will pull off the starters. After a colony has nearly filled the frames with comb, I put starters on the bottom bar, reverse the frame, and soon have it solid with worker comb. If there is too much drone comb it should be cut out and replaced by

worker comb. If the frames are very nearly filled with comb, I reverse them without putting in any starters.

Now for the advantages of reversible frames, which are very many. You can get the frames entirely full of comb, if not reversed; but bees seldom attach comb to the bottom bar. You can force the bees to carry honey from the brood-chamber to the sections above. Instinct teaches them to remove the honey as far from the entrance and bottom of the hive as possible. By reversing the frames you put the honey at the bottom; and as brood occupies what is then the top of the frame, the bees are compelled to go above the frame into the sections with their honey.

With reversible frames no complaint will be made of the industrious Italians not working in boxes; the brood not being depleted of too much honey thus easily without extracting, and in such a way that the same cells will not again be filled; and the queen can be kept busy in the center of the hive and will not be tempted so strongly to go above or to the sides to deposit eggs; hence division-boards, at the sides, can be done away with.

All division-boards and fixtures in a hive which prevent a continuous communication between all parts of the hive are a disadvantage. There should be no stoppage possible to avoid, between the brood-nest, storage, and comb-building room, at the sides and above. Reversible frames help to realize this ideal by giving the queen full employment without confinement.

Grenada, Miss.

For the American Bee Journal.

Facts Regarding Sweet Clover.

DR. W. G. PHELPS.

In common with many bee-keepers, I have taken a lively interest in the propagation of that excellent honey-producing plant—sweet clover; and my experience may be of some value to the readers of the BEE JOURNAL.

In the spring of 1883, I had upon my place a patch of rye, sown the fall previous, with the intention of utilizing it for soiling purposes, or to turn under as a green manure. It flourished so well, however, that for various reasons I concluded to harvest it. This was about the last of May, and, according to general opinion, too late to sow thereon any of the many varieties of clover, and particularly the melilot; but sow it I did, even though the ground was dry, after which I harrowed it lightly.

The results, contrary to my expectations, was all that could be desired, proving conclusively that sweet clover seed will germinate freely, without being subjected to the action of frost, as commonly believed.

Furthermore, in less than 2 months from the time of sowing, after harvesting rye, the clover furnished a pasture for stock which they much preferred to any other. They would leave luxuriant red clover, to nibble at melilot.

In regard to sowing, the following extract by Mr. H. W. Garrett, of

Coeyman's Hollow, N. Y., will be of interest:

"That sweet-clover seed needs the actions of frost upon it, I do not believe; for it will germinate much quicker than red clover. Having had a long experience with the two, I can speak from personal observations.

It is common to let red clover, cut for seed, remain on the lot a long time before threshing it, and there is no danger of the seed germinating; while sweet clover, if left on the ground and rained on, will frequently sprout when in close contact with the earth, or in thick bunches where the sun cannot penetrate and dry it out.

Sweet-clover seed being retained in its hull, holds moisture when sown, and will therefore quickly germinate. I would advise sowing it when all danger of frost is past. As a honey-plant for all seasons, wet and dry, it has no equal."

One of the objects of this article, is to make apparent the fact, not comprehended by many, that the present is the most propitious season for seeding "the waste places" with this desirable plant. If it be the "noxious weed" the unthinking have called it, give me more of it.

It stands on the patch referred to as sown last season, at least 4 inches higher than the red clover adjoining it, though the latter occupies much richer soil. Being eaten so readily by all kinds of stock in the green state, I believe it will make most delicious provender when cured as hay.

Last, but not least, I look to it as a most acceptable foraging ground for my bees, when other sources fail. With this fact in view, I have sown over 10 lbs. this season, in vacant places and on the highways; feeling that as "bread cast upon the waters, it shall return to me after many days."

Galena, Md.

For the American Bee Journal.

Packing, Feeding, Wintering, etc.

W. C. LESTER.

I use Root's chaff hive and Langstroth frames, and usually commence packing my bees on Nov. 1, or earlier if the weather becomes cool. I examine each colony to see how well they are supplied with stores, and if each has from 20 to 25 lbs. of honey, and $\frac{1}{2}$ sealed stores, I consider it in favorable condition for packing. Colonies that have not enough stores, I feed granulated sugar syrup, and prepare them the same as Mr. G. M. Doolittle explains on page 479, BEE JOURNAL for 1883.

I use cake-tins, 4x4x13 inches, for feeders; and one or more can be used in the same hive by placing them on top of each other. I take about half a handful of rye straw—cut it off the right length to fit inside of the feeder. I then pour the syrup into the feeder, and put straw in it on top of the syrup, this being a foothold for the bees while getting the syrup.

I place the feeder on the bottom-board of the hive, side of the combs; in this way the bees have free access

to the feeder, and empty it quicker than any other I have used.

I winter my bees on from 6 to 9 combs, or less if they cannot cover them, and use one or more chaff-division boards if needed, to occupy vacant space in the brood chamber. I prefer burlap or any other porous material, to enamelled cloth. I have used ticking successfully, before covering the frames. I use a block of wood or any small piece, or wood that forms a bridge over the top of the frames, after laying the burlap over it. I then fill the upper story with forest leaves. I have used chaff with $\frac{1}{2}$ cut straw, but I prefer forest leaves to any other packing I have used.

Having noticed considerable in the BEE JOURNAL in regard to the "pollen theory," I concluded to test it on a small scale, by taking 3 colonies of bees, one of blacks, one of hybrids, and one of Italians. I took all their stores from them, and selecting such combs as had no pollen and entirely empty, I gave as many of them to the 3 colonies as they could occupy. I fed them nothing but granulated sugar syrup, and as much as they could store into the combs constantly, and then prepared them the same for winter as I did my other colonies.

On page 593, BEE JOURNAL for 1883, L. C. Johnson, M. D., speaks of the qualities of the different races of bees.

Taking all into consideration, as near as I can learn, the Italians possess as good qualities as any other race; but I do not think it advisable to cross the Italians with 3 or 4 different races. Nor do I think it advisable to mate them purely, except for breeding purposes, and then breed queens and drones from the very best queens.

I prefer a cross between the Italians and brown bees. My experience with them for the past 3 years, proves to me that they can store as much honey, either comb or extracted, as any other hybrids.

Washington Hollow, N. Y.

For the American Bee Journal.

Concerning Thermometers.

JOHN PHIN.

I reply as follows to Mr. R. E. Knapp's questions on page 172:

Ques. 1. "Does extreme heat or cold cause the mercury or spirit thermometers to incorrectly register degrees of temperature?" All thermometers when near the limit of their range, give irregular and uncertain indications. The limits for mercury are 35° below zero, and about 500° above zero. It is true that the indications are pretty nearly accurate at all ordinary temperatures; and perhaps the extremes of Mr. K.'s thermometer do not extend as far as the figures I have given.

A spirit thermometer has greater range below zero, but not so great above. Spirit thermometers are never used for temperatures higher than summer heat, but they afford the only convenient means of measuring temperature below the freezing point of mercury. Pure alcohol does not freeze at any natural temperature, but its indications become irregular.

Capt. Parry in his Arctic voyages observed differences of 18° between alcohol thermometers of the best makers; and similar facts were noted by Franklin and Kane. But the extremes to which these investigators exposed their thermometers, were greater than any that will be found in the climatic conditions to which we are exposed; and here, therefore, I may answer the 4th question. I say that except for temperature lower than 36° Fahr. below zero, the mercury thermometer will be found the most reliable.

Ques. 2. "Will a thermometer which registers incorrectly by the ice-test, run uniformly up and down the scale the same number of degrees that it varies?" This will depend upon circumstances. The error of the thermometer may be due to a change in the size of the bulb (due to a molecular change in the glass); and in this case the error will not remain the same; i. e., we can not make a perfect correction by simply adding or subtracting a certain number of degrees; but if the thermometer tube were kept for a year or two after being filled it would then probably change as much as it ever would, and any error must be due to the displacement of the scale, or to bad original workmanship. If to a displacement of the scale, all we have to do is to add or subtract the known error as may be necessary. Bad workmanship can not be easily corrected; the only way would be to compare the thermometer with a standard instrument, and note the error at every 10°.

Ques. 3. "Will an old-tested thermometer, say 10 years old, mark the degrees as perfectly as a newly-tested one?" Thermometers which are exposed to great extremes of temperature may change somewhat even after the second year, but not to any great extent. Therefore, I should say, that a thermometer which had been tested when two years old, might be relied upon ever after in all ordinary work. This, however depends somewhat on the glass that is used, but it is true in most cases. For extremely accurate work thermometers should be tested every 3 or 6 months.

I may add that the variations of which I have been speaking are comparatively slight, and are nothing when compared with the ordinary errors of observation. In common thermometers the chief source of error lies in the bore of the tube. A thermometer may be perfectly accurate at the principal fixed points (32° and 212° above zero), and yet show great errors between them. The only really correct thermometer is the air-thermometer as used by Regnault; but this instrument can not be used by those who have not the conveniences of a large laboratory.

To sum up the whole matter: A good mercury thermometer which is over two years old, and which is correct at 32° and 212° above zero, (the freezing and the boiling points of water) may be depended upon for all the ordinary requirements of life, and it will not deteriorate by any ordinary usage or exposure.

Patterson, N. J. April 15, 1884.

Local Convention Directory.1884. *Time and place of Meeting.*June 6.—Mahoning Valley, at Newton Falls, O.
R. W. Turner, Sec.June 19.—Northern Mich. at Ionia.
F. A. Palmer, Sec.Oct. 11, 12.—Northern Mich., at Alma, Mich.
F. A. Palmer, Sec., McBride, Mich.Oct. 15, 16.—Northwestern, at Chicago, Ill.
W. Z. Hutchinson, Sec.Nov. 25.—Western Mich., at Fremont, Mich.
Geo. E. Hilton, Sec.Dec. 10, 11.—Michigan State, at Lansing.
H. D. Cutting, Sec., Clinton, Mich.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Good Results.

I have 66 colonies which are doing well. Last year my bees produced 7,600 lbs. of honey, and over 100 lbs. of wax.
Mrs. C. M. KINGSLEY.
Elvaston, Ill., May 15, 1884.

Are Bees Taxable in Illinois?

The assessor attempted to assess my bees, but I do not think it is lawful to assess farmer's bees. This is the first time it has ever been tried here. I believe it would be a great favor to bee-keepers generally, to have this determined.
A. WICHERTS.
Matteson, Ill., May 16, 1884.

[In this State it is by law made the duty of the assessor to "list" colonies of bees, as is shown by the published quarterly reports. That they are taxable in Illinois, we think does not admit of a doubt.—ED.]

Bees in Eastern Ohio.

Bees in this locality wintered moderately well so far as I have been able to ascertain. One apiarist put 15 young colonies into a vault last fall and this spring 8 of them were alive. Another apiarist lost 12 colonies out of 44. Last spring I began the season with 10 colonies in fair condition. I stimulated them by feeding them sugar-syrup until they could get their own living. It being a very poor season for honey, they did not gather very much surplus honey, and what they did gather I saved for feeding them this spring, if needed. Two colonies swarmed, one left and the other died late in the fall, thus leaving only 10 colonies. On March 24 I examined all of them and found 1 dead, and the rest in good condition; yet I gave each of them a comb of honey. They all contained brood at this time. The weather set in cold again, and I did not look at them until April 11, and I found 8 doing well, and for some cause the other was dead. I did not feed them very long. On May 11, a swarm issued and I put it into a hive with 8

nice combs. I looked at them May 15, and found new honey in 6 combs, and 2 with eggs in.
R.
Barnesville, O., May 16, 1884.

Women as Apiarists.

My bees wintered well. All came out strong and healthy. I have sold 50 colonies this spring. I cannot help thinking that bee-culture is a good occupation for women. I attend to my bees without the assistance of any one, except the supply dealers; for in these progressive times one can buy everything pertaining to the bee-business, all nicely prepared and ready for use. That alone is enough to tempt one into the business; and truly, I keep bees as much for pleasure as for profit, and have lots of spare time, too, for other work. I am sure if I were compelled to earn my own support, there are few pleasanter occupations in which an intelligent woman could engage.

Mrs. DR. E. H. MASON.
Vincennes, Ind., May 16, 1884.

Bees Storing Honey Rapidly.

Since I have kept bees I never saw them gather so much honey from fruit bloom as they have this year. Each colony has gained in weight from 10 to 15 lbs. All my colonies are now crowded with bees and brood. They are in the best possible condition for the clover bloom, which will be here soon. I expect some swarms in a short time.
H. T. HARTMAN.
Freeport, Ill., May 20, 1884.

Botanical.

Enclosed I send a plant which is very abundant here, and much used by bees. What is its botanical name? and its value as a honey plant? We have had a remarkably wet spring, and vegetation is unusually vigorous and dense with an endless variety and quantity of flowers. Notwithstanding much of the weather has been quite cool for the season and climate, bees are doing exceedingly well, and are very prolific in swarms.

W. P. HANCOCK.
Salado, Tex., May 7, 1884.

[It is *Gaura filipes*. It belongs to the Evening Primrose family, most species of which yield nectar.—T. J. BURRILL.]

Bees along the Pacific Coast.

This spring has been the warmest and finest I have known in Oregon during my 32 years' residence. Bees have been doing better than ever before. I took out, for the first time since being a bee-keeper, comb honey made of the peach, pear, cherry, and plum bloom in the month of April. Some bees in smaller hives swarmed during April. We never had better prospects for a good honey crop; other crops also look well. I have quite a lot of fertilized young queens at my Washington Ter. apiary. I must here mention in connection with the rearing of young queens, that Oregon possesses what perhaps none of

the Eastern States do; and that is such a wonderful bee-man as a queen-bee surgeon, accoucheur, and midwife. This medical or surgical queen-bee genius, claims that he played the part of an accoucheur surgeon and midwife for one of his queen-bees, which after fertilization, would not lay the first egg. He did not apply browned butter like is done to young bees, but performed a surgical operation with the point of a very fine needle. He said the operation proved a success, and the mother and her egg lived and are doing well. Who of you Eastern queen-breeders can come up to that? Would it not be well for all the Eastern queen-breeders, as a whole, to engage this man's valuable services, as they are wasted here in Oregon, where apiculture is carried on in all kinds of boxes, and even in sugar and nail kegs. We have also a farmer who every year kills his old colonies of bees to obtain the honey. The old man thought that the old way of killing the bees was the best, and did not know he was killing his young queens in the old colonies. He has now learned his mistake—transferred his bees in movable-comb hives, and will no longer murder his young queens for honey in old combs. As the Pacific coast has never yet done anything for progressive apiculture with regard to introducing new varieties of bees, I have come to the conclusion to try introducing bees from China by the mail steamers via Japan. I believe the trip requires about 25 days, and I have found acquaintances who think it can be done through our former American Consul, who is now a resident of the city again, and is said to be a very obliging man. I shall let you know more about the prospects of the China bee in due time. GUST MURHARD.
Portland, Oreg., May 10, 1884.

Dandelions and White Clover.

My 50 colonies of bees were never in as good condition before fruit bloom, as they are now. One colony is storing surplus honey. The roadsides are yellow with dandelions, and the white clover heads begin to appear. The apple trees will bloom this week if the weather is fair. Prospects for a good honey crop in this vicinity, was never better than now. GEO. E. HILTON.
Fremont, Mich., May 19, 1884.

How my Bees Wintered.

Last fall I had 38 colonies and one nucleus. The 38 came through the winter in splendid condition. I always winter my bees on the summer stands, and they can eat pollen if they wish.
F. J. SAWIN.
Kirkwood, Ill., May 15, 1884.

Weather Unfavorable for Bees.

I hope the readers of the BEE JOURNAL are having a better spring for bees than we are having here in central New York. The last 2 weeks have been cold and wet; in fact, the whole spring has generally been cold, so that with the exception of a few strong colonies, bees are mostly weak. Many

of my colonies are not nearly so good as they were April 1, and this but echoes what I hear from all bee-keepers near me. High winds, rain, and frosts is the order of the day here.

G. M. DOOLITTLE.
Borodino, N. Y., May 17, 1884.

Still Room for more.

We have had a very late, wet and cold spring. Swarming is about two weeks later than it was last year. The prospect is good for an abundant honey crop. Apiaries are becoming very numerous in this part of the county. There are plenty of sage and other plants here, thus making it a good place for bees. Hundreds of acres of unoccupied land well adapted to bee-culture, can be found here.

JOHN L. SECOR.
Monterey, Cal., May 4, 1884.

Not One Colony Lost.

Last fall I had 17 colonies. I put 15 of them (12 strong and 3 weak) into my new bee-house, and the remaining two were left on the summer stands, and the latter, I think, will soon swarm. The three weak ones came out with more bees than when put in. I have had to feed them some, and I expect a good harvest. My bees consumed from 10 to 19 lbs. per colony, during the winter. B. E. FOSTER.
Utica, N. Y.

What and How.

ANSWERS BY

James Heddon, Dowagiac, Mich.

Introducing Fertilized Queens.

1. What is the best method of introducing a fertilized queen into a colony which has cast a swarm?
2. Ought a queen to be introduced into a colony as soon as the swarm is gone?
3. I know of parties who extract all the honey from the brood-chamber once a week, in the forepart of the honey harvest, and let the bees fill it up again with fall honey, for winter stores. Do you approve of such a course?
4. Is it not better to let the brood-combs alone?

C. UPTON.
Fenwick, Mich., May 10, 1884.

ANSWERS.—1. Cut out all the queen cells, and put the new queen in a cage between the combs, and leave her there for 24 hours, then if no balling of the cage is going on, liberate her. Many of us have been successful by daubing the new queen with honey, and smoking her in at the entrance.

2. I should never introduce a valuable queen to such a colony. They are less apt to be received in such an one. The idea that the colony should not remain queenless any time after the swarm leaves, without great loss, is only another of the mistakes of theorists.

3. I feel just as safe in wintering bees with fall honey, as with that from clover and basswood.

4. Yes; it is better to use 2 stories, and extract from the upper one almost exclusively; not because it injures the bees, or the chances of wintering them to extract honey out of the brood chamber, but because it is less trouble.

Questions About Queens.

1. When a first swarm issues, Mr. Heddon says that the queen is about a year old. How old is the queen which is left with the colony?
 2. How old is the queen which goes with the swarm that issues from the first swarm? Is it the one which issued with the first swarm?
 3. Does the oldest or youngest queen issue with the swarm.
 4. Does one queen remain in the same colony until she is removed?
- Please do not refer to back numbers.

S. F. D.

ANSWERS.—1. The queen which is left with the colony is not yet out of the cell, nor does she usually emerge till about 8 days after the swarm issues.

2. Yes; it is the one that issued with the first swarm.

3. The oldest one.

4. No; they change every time a prime swarm is cast. About the 4th or 5th year of a queen's life, she loses her fertility, and is superseded by a young one reared by the bees to take her place. Sometimes we find both old and young queens in the hive together; the old one seemingly tolerated there out of respect for what worth she "has been." This may be used as a moral lesson.

Disabled Queen.

Did you ever know a good queen to become disabled all at once, and not have a cell of brood in the hive, and the bees still retain her?

WM. MALONE.
Oakley, Iowa, May 7, 1884.

ANSWER.—Yes; and I have never been able to learn the real cause. A bee is a small insect, and what are no doubt simple physiological facts when we understand them, are enigmas to the general honey-producer. Such men as Prof. Cook are the ones who know most about such matters.

The members and friends of the Northern Michigan Bee-Keepers' Society, will hold a basket picnic at the apiary of Miss F. A. Bellamy, one mile west of Ionia, on June 19. Teams will be in waiting to convey, free of expense, all who wish to attend. Purchase your tickets to Ionia, but leave the cars opposite the prison grounds. Miss B. requests that you bring your wife or husband, as the case may be, and also that you drop her a postal, notifying her of your intention to be present, in order that ample provision may be made to convey all from the trains. Come on the morning train and return in the afternoon.

F. A. PALMER, Sec.
S. J. YOUNGMAN, Pres.

The Mahoning Valley Bee-Keepers' Association will hold its next meeting at Newton Falls, O., on June 6, 1884. It is desired that a display of apiarian supplies and samples of honey be made at that time. Mr. Hammon, of Bristolville, and Mr. C. R. Page, of Streetsborough, will read practical essays on topics pertaining to bee-keeping.

E. W. TURNER, Sec.
L. CARSON, Pres.

Honey and Beeswax Market.

OFFICE OF THE AMERICAN BEE JOURNAL.
Monday, 10 a. m., May 26, 1884.

The following are the latest quotations for honey and beeswax received up to this hour:

CINCINNATI.

HONEY—The demand for all honey is very slow; market dull and prices range from 6@9c for extracted. Different lots of choice comb honey in small sections have been offered and sold in our market lately at 12@14c per lb. As I predicted some time ago, the preference for the production of comb honey seems to be prevalent; and, as we have the best prospects for an abundant harvest this year, we may prepare for low prices.

BEESWAX—Is in good demand; choice yellow brings 35c a lb. on arrival. CHAS. F. MUTH.

NEW YORK.

HONEY—The prospects are that but little honey will be carried over, and that will all be in 2-lb. sections. More one-pounds should be produced for this market. We quote:

Fancy white in 1-lb. sections, packed in clean crates, 16@17c; 2-lb. 13@15c. Fair to good white, 11@14c; dark, 10@13c. Extracted, 8@9c.

BEESWAX—Scarce, 36@38c.

MCCAUL & HILDRETH, 34 Hudson St.

BOSTON.

HONEY.—Demand light. 1 lb. sections comb honey, 16@20c; 2 lb. 16@18c. Extracted, 9@11c.

BEESWAX—35c.

BLAKE & RIPLEY, 57 Chatham Street.

CHICAGO.

HONEY—Choice white comb honey in 1 lb. sections brings 18c; in 1 1/4 to 2 lb. sections, quotable at 16c. Comb honey discolored and in undesirable shape is selling at 10@12c. Extracted honey is in light demand at 6@8c. Manufacturers of syrups and bakers say that the low price of sugar is the reason why they do not use as much honey as formerly. There is very little desirable comb honey on the market.

BEESWAX—Is scarce and fancy yellow brings 38c. Poor beeswax, but dark, and having more or less of dregs or refuse matter in it, quotable at 30 @33c.

R. A. BURNETT, 161 South Water St.

SAN FRANCISCO.

HONEY—This market is almost wholly nominal, and will probably continue so for at least a fortnight, when new honey will be due. White to extra white comb, 15@18c; dark to good, 10@13c; extracted, choice to extra white, 7@9c; dark and candied, 5@.

BEESWAX—Wholesale, 27 1/2 @30c.

STEARNS & SMITH, 423 Front Street.

KANSAS CITY.

HONEY—No perceptible change in the demand for choice white comb 1 and 2-lb. sections, at 15@16c; but dark and irregular comb, or even choice comb in any but clean, neat and uniform packages, goes begging at 10@12c. Extracted, quiet and in good supply, nominal at 7@9c.

BEESWAX—Small lot sold to-day at 35c. None to speak of in the market.

JEROME TWICHELL, 514 Walnut Street.

ST. LOUIS.

HONEY—Steady; demand and supply both small. Comb, 12@14c per lb., and strained and extracted 6@8c.

BEESWAX—Firm at 32@33c. for choice.

W. T. ANDERSON & CO., 104 N. 3d Street.

CLEVELAND.

HONEY—The honey market is fairly active on best white 1 lb. sections at 18c; 2 lbs. best white not quite so active at 17c; 1 lb. sections sell quickly on arrival, and often are sold to arrive. Second qualities continue very dull—are hardly salable at any price. Extracted is not wanted.

BEESWAX—Scarce at 35c.

A. C. KENDEL, 115 Ontario Street.

SAN FRANCISCO.

HONEY—We quote comb honey in 2 lb. sections, 18@20c; extracted, 7 1/2 @8 1/2c.

GEO. W. MEADE & CO., 213 Market St.

Special Notices.

Examine the Date following your name on the wrapper label of this paper; it indicates the end of the month to which you have paid your subscription on the BEE JOURNAL.

For safety, when sending money to this office get either a post office or express money order, a bank draft on New York or Chicago, or register the letter. Postage stamps of any kind may be sent for amounts less than one dollar. Local checks are subject to a discount of 25 cents at Chicago banks. American Express money orders for \$5, or less, can be obtained for 5 cents.

We wish to impress upon every one the necessity of being very specific, and carefully to state what they desire for the money sent. Also, if they live near one post office, and get their mail at another, be sure to give us the address we already have on our books.

When writing to this office on business, our correspondents should not write anything for publication on the same sheet of paper, unless it can be torn apart without interfering with either portion of the letter. The editorial and business departments are separate and distinct, and when the business is mixed up with items for publication it often causes confusion. They may both be sent in one envelope but on separate pieces of paper.

It must be understood that, should an advertiser desire to cancel an unexpired contract, he can do so only by paying regular rates for the number of insertions his advertisement has had.

All money orders from foreign countries, should be made payable at Chicago, as the "Madison Street Station" is not an International office.

In reply to many correspondents let us say that we take any kind of postage stamps at their face value—including the 3 cent ones. Silver should never be sent by mail, as it endangers the loss of the letter either by thieves, or else breaks through the envelope and is lost in that way.

We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails we will cheerfully send another, if notified before all the edition is exhausted.

Subscription Credits.—We do not acknowledge receipt of each subscription by letter. The label on your paper, or on the wrapper shows the date to which your subscription is paid. When you send us money, if the proper credit is not given you, within two weeks thereafter on your label notify us by postal card. Do not wait for months or years, and then claim a mistake. The subscription is paid to the end of the month indicated on the wrapper-label. This gives a continual statement of account.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

GETTING UP CLUBS.

To increase the number of readers of the BEE JOURNAL, we believe, will aid progressive bee-culture and help to elevate the pursuit. We, therefore, offer the following premiums for getting up clubs:

While no subscription to the BEE JOURNAL will be taken for less than the regular advertised prices (viz.: Weekly, \$2.00; Monthly, \$1.00),—any one getting up a club of two copies, or more, may select from "OUR BOOK LIST" anything therein named, to the amount of 15 cents for every dollar they send direct to this office, to pay them for the trouble of getting up the club; and these books will be sent, postpaid, to any address desired.

For a club of 3 Weekly or 6 Monthly and \$6.00, we will make an additional present of a Pocket Dictionary, bound in cloth, containing 320 pages.

For a club of 5 Weekly or 10 Monthly, (or a mixed club of both,) with \$10, we will, in addition to the 15 per cent, present a copy of the AMERICAN "POPULAR" DICTIONARY, comprising every word in the English language that enters into speech or writing; it contains 32,000 words and phrases, 670 illustrations and 512 pages; it is nicely bound in cloth, and will be sent by mail, postpaid, to any address desired.

Subscriptions for two or more years for one person, will count the same as each year for a different person.

Apiary Register—New Edition.

All who intend to be systematic in their work in the apiary, should get a copy and commence to use it. The prices will hereafter be as follows:

For 50 colonies (120 pages).....	\$1 00
" 100 colonies (220 pages).....	1 25
" 200 colonies (420 pages).....	1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable ones.

Dzierzon's new work entitled "Rational Bee-Keeping," we now club with the BEE JOURNAL as follows: The Weekly for one year and the book, bound in cloth, for \$3, or in paper covers for \$2.75. The Monthly BEE JOURNAL and the book, \$1 less than the above prices. It is an imported book, printed in the English language, and the price of the book is \$1.50 bound in paper covers, or \$2.00 when bound in cloth.

Emerson Binders—made especially for the BEE JOURNAL, are lettered in gold on the back, and make a very convenient way of preserving the BEE JOURNAL as fast as received. They will be sent, post-paid, for 75 cents, for the Weekly; or for the Monthly, 50 cents. They cannot be sent by mail to Canada.

Honey as Food and Medicine.

A pamphlet of 16 pages giving Recipes for Honey Medicines, all kinds of cooking in which honey is used, and healthful and pleasant beverages.

We have put the price still lower, to encourage bee-keepers to scatter them far and wide. Single copy 5 cents, postpaid; per dozen, 40 cents; per hundred, \$2.50. 500 will be sent postpaid for \$10.00; or 1000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc., (giving the name and address of the bee-keeper who scatters them). This alone will pay him for all his trouble and expense—enabling him to dispose of his honey at home, at a good profit.

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.

For \$2.75 we will supply the Weekly BEE JOURNAL one year, and Dzierzon's Rational Bee-Keeping, in paper covers; or the Monthly BEE JOURNAL and the book for \$1.75. Or, bound in cloth, with Weekly, \$3.00; with the Monthly, \$2.00.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

The first edition of the "Apiary Register" having been exhausted, we have just issued a new edition, elegantly bound in Russia leather, with a large worker bee and "Apiary Register" in gold on the side. It forms not only a Register of both Queens and Colonies, but has also an Account Book at the back, in which to keep a record of all the receipts and expenditures of the apiary, which will be found exceedingly valuable. We have also reduced the prices, as will be seen on another page.

Sample Copies of the AMERICAN BEE JOURNAL will be sent free to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

Do not let your numbers of the BEE JOURNAL for 1884 be lost. The best way to preserve them is to procure a binder and put them in. They are very valuable for reference.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra.

Convention Hand-Book.

This is a nice Pocket Companion for bee-keepers. It is beautifully printed on toned paper, and bound in cloth—price 50 cents.

It contains a copy of a model "Constitution and By-Laws" for the formation of Societies for Bee-Keepers—a simplified manual of Parliamentary Law and Rules of Order for the guidance of officers as well as members, a blank form for making statistical reports—a Programme of questions for discussion at such meetings—model Premium Lists for Fairs which may be contracted or enlarged, and then recommended to the managers of adjacent County or District Fairs—32 blank leaves for jotting down interesting facts, etc.

We have aimed to make it suitable for any locality, and a book that will commend itself to every bee-keeper in the English-speaking world.

We have had some bound in Russia leather, with colored edges—price 60 cents.

We will supply them by the dozen at 25 per cent. discount, post-paid.

It is extravagant economy to delay ordering hives, sections, foundation, etc., till the last moment, or till they are needed for use; for frequently a dealer finds it impossible to fill orders promptly when they are all held back till the last moment. Then, in the rush, many are disappointed. Therefore we would say to all, order early, and save yourselves much vexation and disappointment.

Advertisers' Opinion.

My advertisement in the BEE JOURNAL, has brought me over 400 responses. DR. G. L. TINKER.
New Philadelphia, O.

The queen business is *rushing*, and we think the BEE JOURNAL deserves much credit as an advertising medium.

E. A. THOMAS & Co.
Colerain, Mass., July 18, 1883.

Having advertised in the AMERICAN BEE JOURNAL quite extensively for the past two years, I would say (without solicitation) that it has sold more queens for me than any other three periodicals I have ever tried.

My bees are in fine condition this spring. I have lost but 4 out of 182 colonies. The outlook is fine for a good season. L. J. DIEHL.
Butler, Ind., May 7, 1884.

We can supply photographs of Rev. L. L. Langstroth, the Baron of Berlepsch, or Dzierzon, at 25 cts. each.

EXCELSIOR HONEY EXTRACTORS



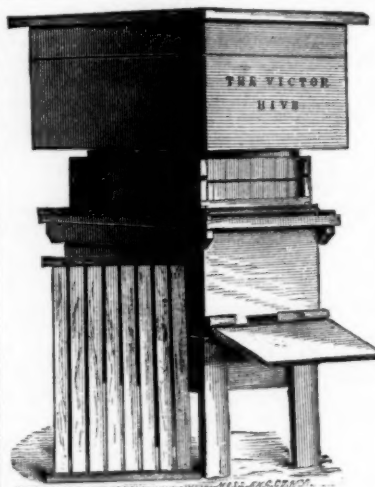
In answer to frequent inquiries for Extractors carrying 3 and 4 Langstroth frames, I have concluded to adopt these two new sizes. The 3 frame basket is in a can of the same size and style as the 2 frame. The 4 frame basket is in the larger can, with the cone or metal standard for the basket to revolve upon, leaving room underneath the basket for 75 or 80 lbs. of honey. It will be complete, with covers, and in every way identical, except in size, with the \$16.00 Extractor, 13x20, which is intended for any size of frame.

Excepting with the \$8.00 Extractors, all the different styles have strainers over the canal leading to the honey gate, and movable sides in the Comb Baskets. The \$8.00 and \$10.00 Extractors have no covers.

For 2 American frames, 13x13 inches.....	\$8 00
For 2 Langstroth " 10x18 "	8 00
For 3 " " 10x18 "	10 00
For 4 " " 10x18 "	14 00
For 2 frames of any size, 13x20 "	12 00
For 3 " " 13x20 "	12 00
For 4 " " 13x20 "	16 00

ALFRED H. NEWMAN,

923 West Madison Street, Chicago, Ill.



It may be arranged for any form of the Langstroth Frame; has been fairly tested, and is the **Best Hive** made for Comb Honey. Send for new Circular.

Address, DR. G. L. TINKER,
444th NEW PHILADELPHIA, O.

SECOND

TO NONE!—ITALIAN Queens and Nuclei. For prices see advertisement for April 30th.
W. C. LESTER, Washington Hollow, N. Y.
21A4t

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

65 ENGRAVINGS

THE HORSE,

BY B. J. KENDALL, M. D.

A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison; a table with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.

Price 25 cents.—Sent on receipt of price, by

THOMAS G. NEWMAN,

923 West Madison Street, CHICAGO, ILL.

DR. FOOTE'S HAND BOOK OF HEALTH,

HINTS AND READY RECIPES,

is the title of a very valuable book that gives a great amount of information, of the utmost importance to Everybody, concerning their daily habits of Eating, Drinking, Dressing, Sleeping, Bathing, Working, etc.

It Costs only **TWENTY-FIVE CENTS**, and contains 28 pages, and is sent by mail, post-paid, on receipt of price. This is just the Book that every family should have.

IT TELLS ABOUT

What to Eat, How to Eat it, Things to Do, Things to Avoid, Perils of Summer, How to Breathe, Overheating Houses, Ventilation, Influence of Plants, Occupation for Invalids, Superfluous Hair, Restoring the Drowned, Preventing Near-Sightedness.	Parasites of the Skin, Bathing—Best way, Lungs & Lung Diseases, How to Avoid them, Clothing—what to Wear, How much to Wear, Contagious Diseases, How to Avoid them, Exercise, Care of Teeth, After-Dinner Naps, Headache, cause & cure, Malarial Affections, Croup—to Prevent.
---	---

IT TELLS HOW TO CURE

Black Eyes, Bolls, Burns, Chilblains, Cold Feet, Corns, Coughs, Cholera, Diarrhoea, Diphtheria, Dysentery, Dandruff, Dyspepsia, Ear Ache, Felons, Fetid Feet, Freckles, Headache, Hiccough, Hives, Hoarseness, Itching, Inflamed Breasts, Ivy Poisoning, Moles, Pimples, Piles, Rheumatism, Ringworm, Snoring, Stammering, Sore Eyes, Sore Mouth, Sore Nipples, Sore Throat, Sun-stroke, Stings and Insect Bites, Sweating Feet, Toothache, Ulcers, Warts, Whooping Cough, Worms in Children.

It will Save Doctor Bills!

Price only 25 Cents. Sent by Mail, post-paid, by

THOMAS G. NEWMAN,
923 West Madison Street, CHICAGO, ILL.

NEW AND USEFUL Articles for the Apiary

Send for our 16-page illustrated Circular.
18Atf HENRY ALLEY, Wenham, Mass.

ELECTROTYPES

Engravings used in the Bee Journal for sale at 25 cents per square inch—no single cut sold for less than 50c. THOMAS G. NEWMAN,

923 West Madison Street Chicago, Ill.

Given's Foundation Press.

PUBLIC SENTIMENT affirms that the PRESS is SUPERIOR for making Comb Foundation either in Wired Frames or for SECTIONS, and insures straight and perfect combs, when drawn out by the bees. Send for Circular and samples.

D. S. GIVEN & CO.,
1AB7t HOOPESTON, ILL.

BIND YOUR JOURNALS

AND KEEP THEM

NEAT and CLEAN.



The Emerson Binder

IS THE NEATEST AND CHEAPEST.

Any one can use them. Directions in each Binder

For Monthly Bee Journal.....50c.
For Weekly Bee Journal.....75c.

Address, THOMAS G. NEWMAN,
923 West Madison Street, Chicago, Ill.

HELLO! HELLO!

We are now ready to Book Orders for
Bee-Keepers' Supplies.

White Poplar **SECTIONS** A Specialty.
Dovetailed

Everything fully up with the times, and
At Lowest Figures!

Send stamp for 32-page Catalogue and Samples.

APIARIAN SUPPLY CO.,

7A6m WILTON JUNCTION, IOWA.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

Vandervort Comb Fdn. Mills,

Send for Samples & Reduced Price-List.

AB1f J. VANDERVORT, Laceyville, Pa.

GOLD

for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of sample goods that will put you in the way of making more money in a few days, than you ever thought possible at any business. Capital not required. We will start you. You can work all the time or in spare time only. The work is universally adapted to both sexes, young and old. You can easily earn from 50 cents to \$5 every evening. That all who want work may test the business, we make this unparalleled offer; to all who are not well satisfied, we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Fortunes will be made by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address STINSON & CO., Portland, Maine.
4A1y

FLAT-BOTTOM COMB FOUNDATION.



high side-walls, 4 to 16 square feet to the pound. Circular and samples free.

J. VAN DEUSEN & SONS,
Sole Manufacturers,
Sprout Brook, Mont. Co., N. Y.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

\$66

a week at home. \$5.00 outfit free. Pay absolutely sure. No risk. Capital not required. Reader, if you want business at which persons of either sex, young or old, can make great pay all the time they work, with absolute certainty, write for particulars to H. HALLETT & CO., Portland, Maine.
4A1y

Muth's Honey Extractor,

Square Glass Honey Jars, Tin Buckets, Langstroth Bee Hives, Honey Sections, etc
Apply to **C. F. MUTH,**
976 and 978 Central Ave. CINCINNATI, O.

Send 10c. for Practical Hints to Bee-Keepers.

CHEAP! CHEAP!

Full Colonies. Nuclei and Italian Queens. Send for Price List before buying elsewhere.
DAN. WHITE, New London, Ohio.
18A5t 5B1t

Eureka Wiring Tool,

For pressing Foundation into wired frames. Something entirely new.
Price, 50c. by mail.; 40c. by express.

Vandervort Foundation Mill.

6 Inch, Price, \$25.00.

It makes the thinnest extra thin Foundation for comb honey. For Sale by

ALFRED H. NEWMAN.

923 West Madison Street, CHICAGO, ILL.

Sixth Thousand Just Published!

New and Enlarged Edition

OF

BEES and HONEY,

OR THE

Management of an Apiary for Pleasure and Profit; by

THOMAS C. NEWMAN.

Editor of the Weekly Bee Journal.

925 West Madison Street, Chicago, Ill.

It contains 220 profusely illustrated pages, is "fully up with the times" in all the improvements and inventions in this rapidly developing pursuit, and presents the apiarist with everything that can aid in the successful management of the Honey Bee, and at the same time produce the most honey in its best and most attractive condition.

Appreciative Notices.

FRIEND NEWMAN:—I acknowledge with pleasure the receipt, this morning, of a very beautiful book, entitled, "Bees and Honey, or, Management of an apiary for Pleasure and Profit; sixth edition, enlarged." The book opens with a kind, familiar face, and the whole subject matter is concise, easy and comprehensive. I read it with much pleasure.
T. F. BINGHAM.

Abronia, Mich., May 1, 1884.

I have received a copy of the revised edition of "Bees and Honey," and after examining the same, find it to be a very handy and useful book of reference on the subject of bees and honey, and believe it should be found in the library of all interested in the study of bees.

H. H. BROWN.

Light Street, Pa., May 8, 1884.

PRICE—Bound in cloth, \$1.00; in paper covers, 75 cents, postpaid.

THOMAS G. NEWMAN,

925 West Madison Street, Chicago, Ills.

A Liberal Discount to Dealers by the Dozen or Hundred.

E. T. LEWIS & CO., Toledo, O.,

MANUFACTURERS OF

All kinds of **Apiarian Supplies.** Special rates to Dealers. Send for Circular. 14A1f

AGENTS

wanted for The Lives of all the Presidents of the U. S. The largest, handsomest, best book ever sold for less than twice our price. The fastest selling book in America. Immense profits to agents. All intelligent people want it. Any one can become a successful agent. Terms free. HALLETT BOOK CO., Portland, Me. 4A1y

Bees, Hives, Extractors, Smokers, Dadant's Foundation, and other Supplies. ARTHUR TODD, Germantown, Philadelphia, Pa. 18A5t

ITALIAN QUEENS, DADANT FOUNDATION, and Supplies.—It will pay you to send for Circular. E. F. SMITH, Smyrna, N. Y. 11A1f

How to Prevent Swarming.

Send for our 23d annual Circular for particulars.

18A1f **HENRY ALLEY,** Wenham, Mass.

Bingham Smoker

Borodino, N. Y., Aug. 15, 1882.

Cyprians Conquered.—All summer long it has been "which and tother" with me and the Cyprian colony of bees I have—but at last I am "boss." Bingham's Conqueror Smoker did it. If you want lots of smoke just at the right time, get a Conqueror Smoker of Bingham. Respectfully,
G. M. DOOLITTLE.

Prices, by mail, post-paid.

Doctor smoker (wide shield) . . . 3 1/4 inch . . .	\$2.00
Conqueror smoker (wide shield) 3 " . . .	1.75
Large smoker (wide shield) . . . 2 1/2 " . . .	1.50
Extra smoker (wide shield) . . . 2 " . . .	1.25
Plain smoker . . . 2 " . . .	1.00
Little Wonder smoker . . . 1 3/4 "65
Bingham & Hetherington Honey Knife, 2 inch . . .	1.15

TO SELL AGAIN, apply for dozen or half-dozen rates. Address,

T. F. BINGHAM, P. M., or
BINGHAM & HETHERINGTON,

ABRONIA, MICH.

The Eureka Wiring Tool

For pressing wire into Foundation. **Price,** by mail, 50 cents. Send for Circulars. FOUNDATION and EXTRACTORS for sale.
17A1f **C. M. RULAND,** Rockton, Ill.

A PRIZE.

Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All of either sex, succeed from first hour. The broad road to fortune opens before the workers, absolutely sure. At once address, TRUE & CO., Augusta, Maine. 4A1y

ITALIAN BEES

AT BED ROCK PRICES.

COLONIES —8 Langstroth Frames, in light shipping box	\$ 4.50
8 Thomas Frames, in light shipping box	3.00
NUCLEI —2 or more, 2 frame, with tested queen	2.00
2 or more, 2 frame, with untested queen	1.50
QUEENS —Tested, by mail	2.00
Untested, by mail	1.00

After June 1st, 25 per cent. off.

After June 1, tested, per dozen 12.00
After June 1, untested, per dozen 9.00

Reared from Imported or Selected home-bred Mothers. No Foul Brood ever known here. Address, **C. WEEKS,**
17A8t CLIFTON, Wayne Co., TENN.

J. W. ECKMAN,

DEALER IN

Pure Italian Bees and Queens

For further information, send for Circular.

7A1y **RICHMOND,** Fort Bend Co. TEXAS.

STANLEY'S

Automatic Honey Extractor AND SMOKER.

Send for descriptive Circular and Prices to

G. W. STANLEY & BRO.,

20A1f WYOMING, N. Y.

Early Spring! Order Now!

To introduce my Italian Queens, I will send one of my Tested Queens, if ordered before May 20th, for \$2. Warranted Queens, \$1. Send \$2 and less, in common letters, at my risk. **E. F. BAKER,**
10A11t Box 342, DES MOINES, IOWA.

GOLDEN ITALIANS!

I now wish to say to my former customers, that I am now ready to fill orders for the following Queens.

Hybrid In May and June, each50
Italian—untested—not warranted, in May and June, each	1.00
Italian—warranted, May and June, each . . .	1.50
Italian—tested Queen	2.50
Full colonies of Hybrids	7.00
Full colonies of Italians	10.00

20A1f **L. J. DIEHL,** Butler, Ind.

1884. 1884.
HEDDON'S
 COLUMN.

BEST GIVEN
COMB FOUNDATION.

Wholesale and Retail.

I now have on hand a freshly-made lot of GIVEN COMB FOUNDATION, made from strictly pure domestic wax, thoroughly cleansed from all impurities. Sizes of brood and surplus, $8\frac{1}{4} \times 16\frac{1}{4}$, or Langstroth size. I have also Dadant's best Brood Foundation of same size; also Dadant's 11x11 for American frames. Send for prices, and state amount wanted. I offer a liberal DISCOUNT to DEALERS.

HEDDON'S LANGSTROTH HIVE.

I believe my Hive is growing in popularity, to a much greater degree, than is the business of bee-keeping. I am now prepared to furnish these hives made up, and in the flat, at very reasonable prices.

One Hive complete for comb honey..\$3.00

(The above will contain two cases complete with sections).

The above Hive complete for extracted honey.....\$3.00

The above Hive complete for both in one 4.50
 One Hive-in the flat..... 2.00
 Five or over, each 1.50

No one should ever order these Hives in the flat, without ordering one made up complete to work by. Parties are advertising Hives as Heddon Hives, that in no wise embrace my principles. Judge only by those purchased from me.

SECTIONS.

I am now ready to furnish white all-Dovetail Sections as follows: $4\frac{1}{4} \times 4\frac{1}{4} \times 6$, 7 and 8 to the foot, per 1,000, \$6.50; $5 \times 6 \times 2$, per 1,000, \$8.00. All shipped from here.

STUDENTS OF APICULTURE

Will receive terms for 1884 on application.

BEEES and QUEENS.

If you contemplate the purchase of Bees in any shape, tested or untested Queens, it may pay you to send for my

CIRCULAR for 1884

And be SURE to state whether or not you have my Circular for 1883.

Address,

JAMES HEDDON,
 DOWAGIAC, Cass County, MICH.



STORY & CAMP,

Manufacturers and Wholesale Dealers in

PIANOS AND ORGANS

Decker Bros.,
 Haines Bros.,
 Mathushek,
 Simpson & Co.,
 Story & Camp.

Estey,
 Story & Camp.

The largest exclusively
 Piano and Organ house
 on the Continent.

Territory given. Agents Wanted. Protection guaranteed.

Catalogues free to any address.
 Write for our prices before buying elsewhere.

STORY & CAMP,

188 & 190 State Street,
 CHICAGO.

203 N. Fifth Street,
 ST. LOUIS.



All my Seed is warranted to be fresh and true to name, so far that should it prove otherwise, I agree to refill orders gratis. A large part of the great collection of Seed I offer is of my own growing. As the original introducer of Eclipse Beet, Burbank Potatoes, Marblehead Early Corn, the Hubbard Squash, and scores of other new Vegetables, I invite the patronage of the public. In the gardens and on the farms of those who plant my seed will be found my best advertisement. Catalogues FREE to all. JAMES J. H. GREGORY, SEED GROWER, MARBLEHEAD, MASS.

WE CALL A NEW BEE VEIL.

the attention of all wanting A No. 1 BEES, Italian, Cyprian or Hybrids, to the following, from one well-known to the readers of this Paper:

"I have never seen a case of foul brood; my bees are entirely healthy, and have always been so, and are O. K. in every respect."
 GEO. B. PETERS, M. D.

We can furnish any number of Colonies of the above Bees, and will warrant safe delivery and satisfaction.

N. B.—No Bees will be sold by us, for any consideration, from any apiary that has ever had a case of foul brood in it. For prices and particulars, send to

FLANAGAN & ILLINSKI,

Lock box 995, Belleville, St. Clair Co., Ills.
 18A13t 6B3t

DOUGHERTY & McKEE,
 Indianapolis, Ind.,

Manufacturers of and Dealers in **BEE-KEEPERS' SUPPLIES and HONEY.** Langstroth HIVES a Specialty. Dadant's Foundation, Bingham Smokers, Wired frames and Foundation from the Given Press, Sections, Extractors and Honey Jars. Send for our **Price List.** 14A26t

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

BEE-KEEPERS, before ordering your **BEE APIARIAN SUPPLIES,** Send for our large Illustrated Catalogue, sent free to any address.

10A24t **E. KRETCHMER,** Coburg, Iowa.

E. T. LEWIS & CO., Toledo, O.,

MANUFACTURERS OF
 All kinds of **Apiarian Supplies.** Special rates to Dealers. Send for Circular. 14Atf



There are five cross bars united by a rivet through their center at the top. These bars are buttoned on to studs on the neck-band. The bars are of best light spring steel; the neck-band of best hard spring brass; the cover is of handsome light material. It is very easily put together, no trouble to put on or take off, and folds compactly in a paper box 6x7 inches by one inch deep. There would be no discomfort in wearing it either day or night, and the protection against Mosquitoes, Flies, Bees, Gnats, etc., is perfect. The weight of the entire Veil being only five ounces.

Price, by Mail or Express, \$1.00.

ALFRED H. NEWMAN,
 923 West Madison Street,
 CHICAGO, - ILLINOIS.

Dadant's Foundation Factory, wholesale and retail. See Advertisement in another column.

THE BRITISH BEE JOURNAL
 AND BEE-KEEPER'S ADVISER.

The **BRITISH BEE JOURNAL** is NOW published SEMI-MONTHLY, at Seven Shillings, per annum, and contains the best practical information for the time being, showing what to do and when and how to do it. **Rev. H. R. PEEL, Editor.**

We send the Weekly **AMERICAN BEE JOURNAL** and the **British Bee Journal**, both for \$3.50 a year.

For Bees, Queens,

Honey, Foundation, Hives, Sections, and all Apiarian Implements, Send for Circular to

FLANAGAN & ILLINSKI,
 1A11y Lock box 995, Belleville, St. Clair Co., Ills.